

COMMUNICATION TERMINAL

[0001] This application claims the priority benefit of the Korean Patent Application No. 10-2006-0116492, filed on Nov. 23, 2006 and No. 10-2006-0116424, filed on Nov. 23, 2006, which are hereby incorporated by reference as if fully set forth herein.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to a communication terminal. Although the present invention is suitable for a wide scope of applications, it is particularly suitable for providing a coaxial cable capable of carrying two kinds of signals or enabling a whole case to perform a ground function.

[0004] 2. Discussion of the Related Art

[0005] Generally, a communication terminal is a portable device personally carried to perform at least one of an audio/video communication function, an information inputting/outputting function, a data storing function, and the like.

[0006] As a communication terminal gets more diversified in functionality, the communication terminal becomes equipped with complicated functions including picture or moving picture photographing, music or moving picture file playback, game play, broadcast reception, etc. And, the communication terminal is implemented as an all-around multimedia player.

[0007] To implement the complicated functions, various new trials are applied to the multimedia player in aspect of hardware or software. For instance, a user interface environment is provided to facilitate a user to search or select a specific function.

[0008] As a communication terminal tends to be regarded as a personal belonging used to express the user's personality, a design of the communication terminal needs to be diversified.

[0009] The communication terminal generally includes a PCB (printed circuit board) loaded with various semiconductor devices implementing various functions of the communication terminal. The PCB receives data from a wireless communication unit, processes the received data, and then transfers output data to various modules of an output unit. So, power and the like necessary for the data processing are provided to the PCB by a power supply unit.

[0010] Since the locations of the wireless communication unit, the power supply unit and the like are limited, the wireless communication unit, the power supply unit and the PCB are connected via a coaxial cable in general.

[0011] A coaxial cable of a related art consists of a first conducting wire carrying an electric signal, an inner insulating layer enclosing the first conducting wire to insulate, a second conducting wire cutting off an external electric wave and the like not to be introduced into the first conducting wire, an outer insulating layer protecting the second conducting wire.

[0012] The coaxial cable plays a role in enabling positions, which are spaced apart from each other within a communication terminal or the like, to electrically communicate with each other. The positions, which are to communicate with each other, communicate with each other via the first conducting wire. And, the second conducting wire is installed to communicate with a ground portion on a PCB for grounding.

[0013] However, the above-explained related art is unable to avoid the following problems and limitations.

[0014] First of all, in the related art, a coaxial cable connects an antenna and a PCB together to transfer an electric (electrical) signal. In case of attempting to send a different electric signal, a separate cable is needed to send the different electric signal.

[0015] In particular, the second conducting wire of the related art coaxial cable is connected to the ground but is not used as a path for carrying the electric signal. So, a separate coaxial cable is added according to an electric signal type to carry the specific type of electric signal.

[0016] Secondly, the second conducting wire of the related art coaxial cable is connected to the ground part on the PCB to be grounded. Yet, an external electric wave is not smoothly cut off. So, an error is generated from the electric signal flowing through the corresponding conducting wire.

SUMMARY OF THE INVENTION

[0017] Accordingly, the present invention is directed to a communication terminal that substantially obviates one or more problems due to limitations and disadvantages of the related art.

[0018] An object of the present invention is to provide a communication terminal, by which a coaxial cable capable of carrying a pair of signals is provided to the communication terminal.

[0019] Another object of the present invention is to provide a communication terminal, by which a whole case performs a grounding function for a coaxial cable to enhance the grounding function.

[0020] Additional advantages, objects, and features of the invention will be set forth in part in the description which follows and in part will become apparent to those having ordinary skill in the art upon examination of the following or may be learned from practice of the invention. The objectives and other advantages of the invention may be realized and attained by the structure particularly pointed out in the written description and claims hereof as well as the appended drawings.

[0021] To achieve these objects and other advantages and in accordance with the purpose of the invention, as embodied and broadly described herein, a communication terminal according to an embodiment of the present invention includes a coaxial cable including a first connecting wire, an inner insulating layer configured to enclose the first connecting wire, a second connecting wire enclosing the inner insulating layer, and an outer insulating layer configured to enclose the second connecting wire in a manner of exposing a portion of the second connecting wire and a case having an inner face contacted with the exposed portion of the second connecting wire in part.

[0022] Preferably, the coaxial cable is configured to electrically connect a PCB part loaded with various electronic parts therein and a wireless communication unit including an antenna together.

[0023] Preferably, a plurality of penetration holes configured to be penetrated in a longitudinal direction are further provided to the inner insulating layer of the coaxial cable and a plurality of the penetration parts are filled up with air.

[0024] Preferably, at least one recessed portion is formed on the outer insulating layer to expose the portion of the second connecting wire externally and at least one fixing